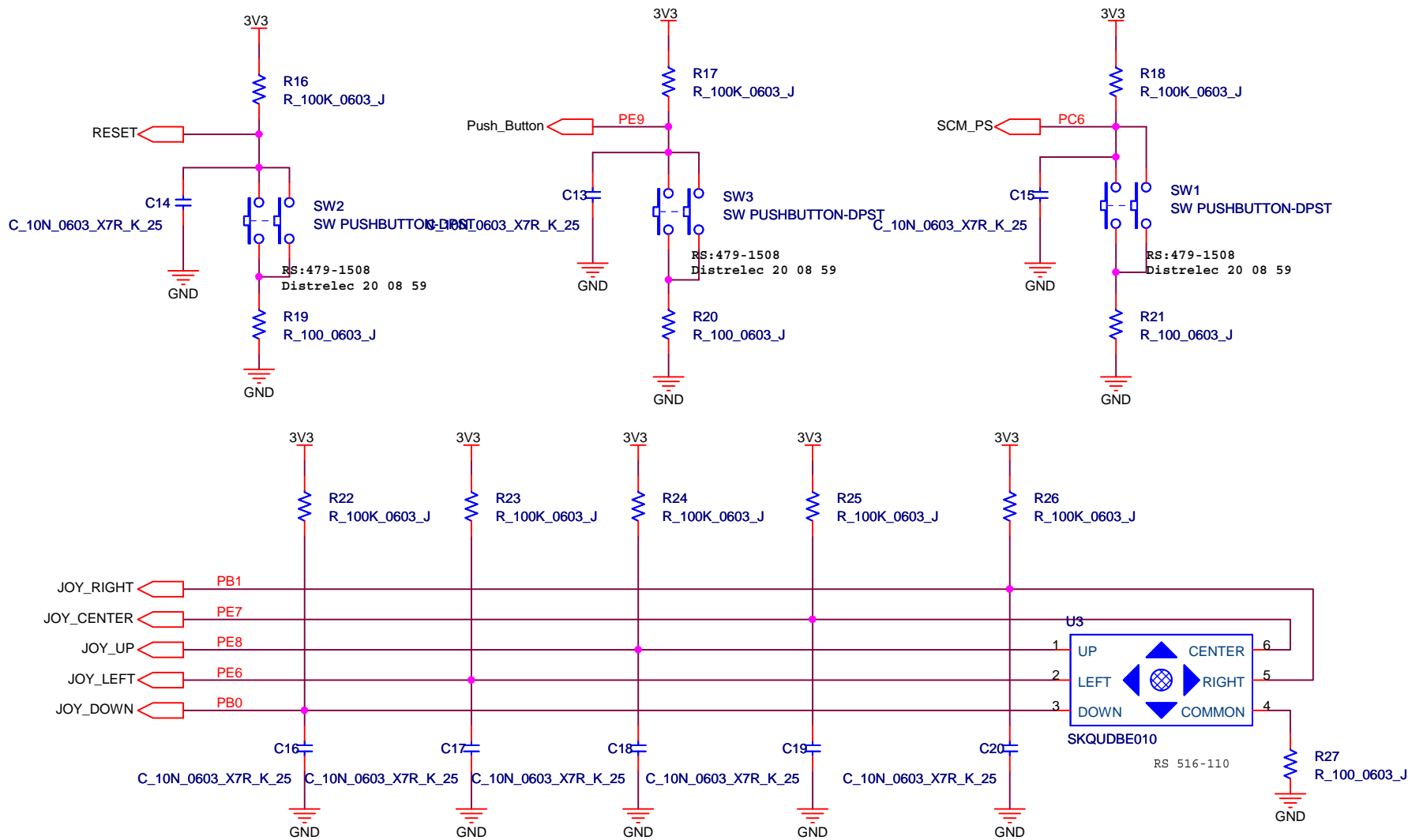


STMicroelectronics		
Title: SPIRIT1-Development Kit		
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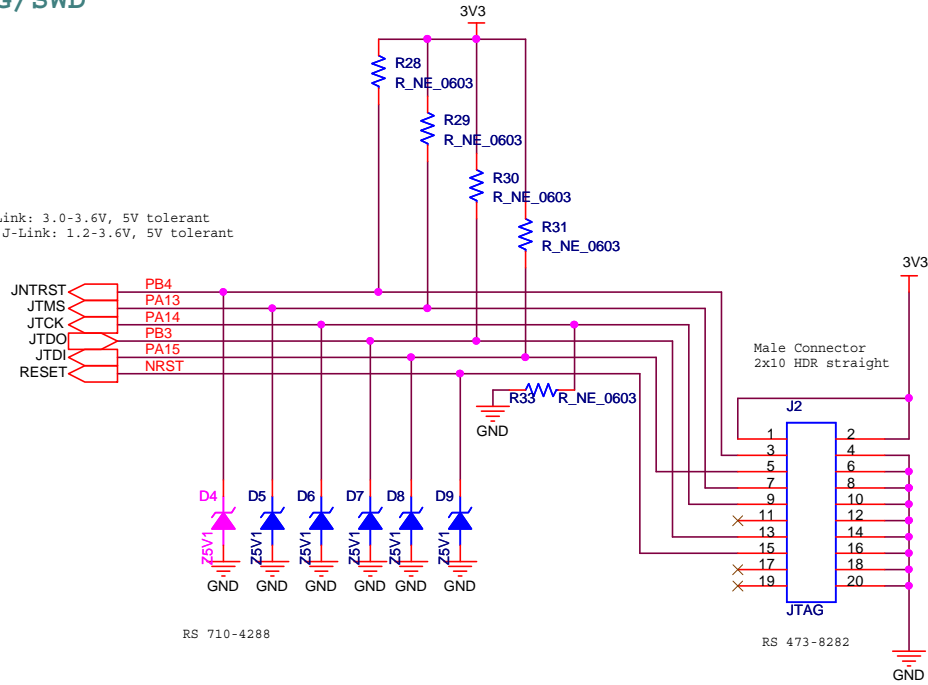
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Buttons & Joystick		
Size	Document Number	Rev
A	<Doc>	B.1
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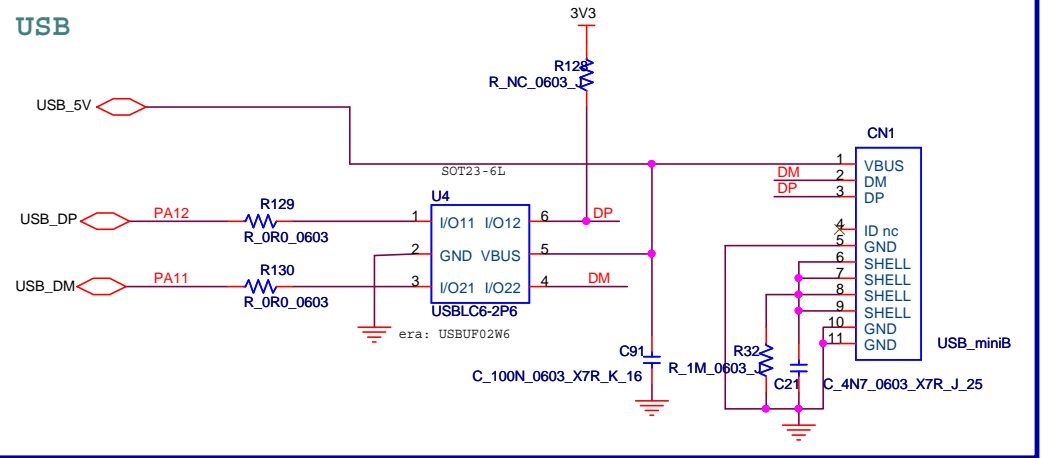
www.BDTIC.com/ST

JTAG/SWD

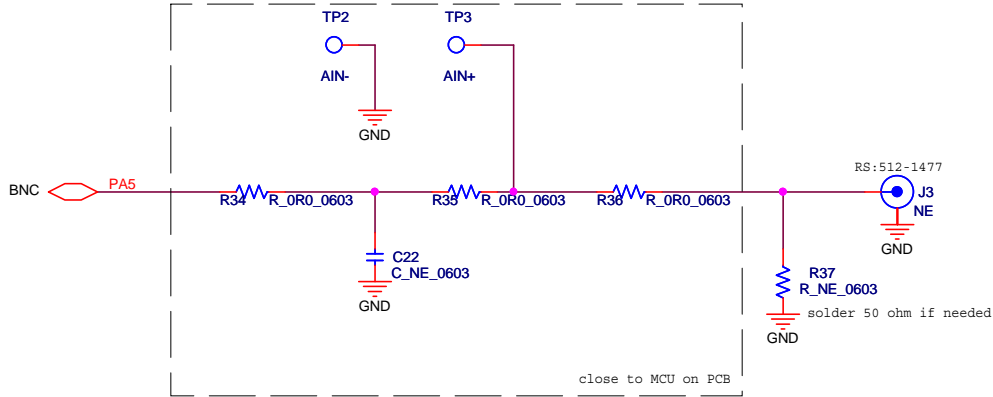
ST Link: 3.0-3.6V, 5V tolerant
IAR J-Link: 1.2-3.6V, 5V tolerant



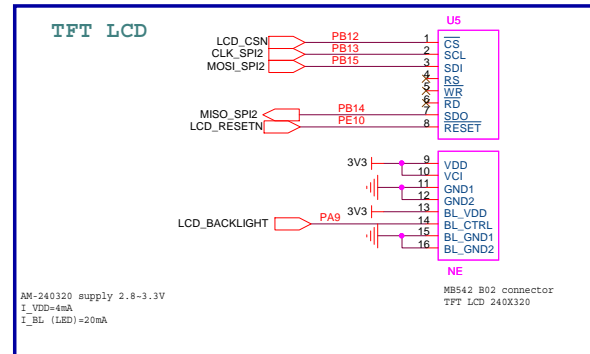
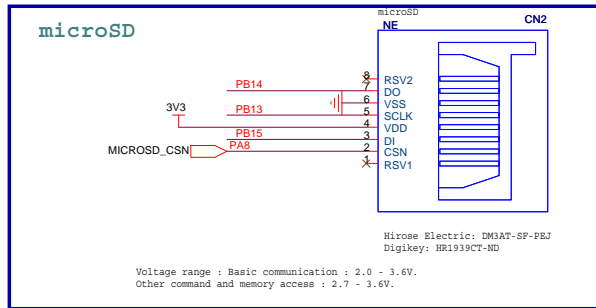
USB



BNC

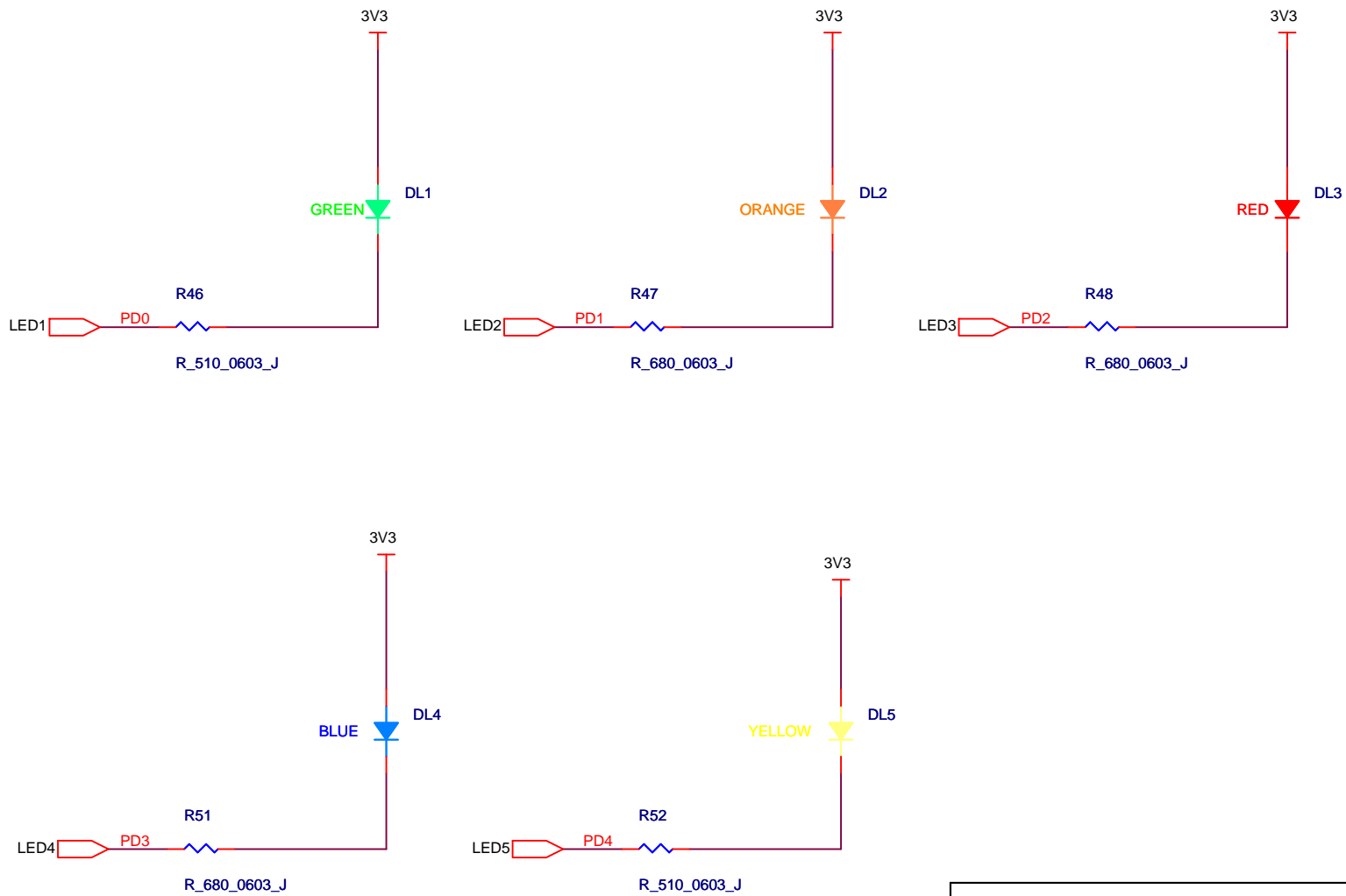


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Title		LCD-SDA_Card	
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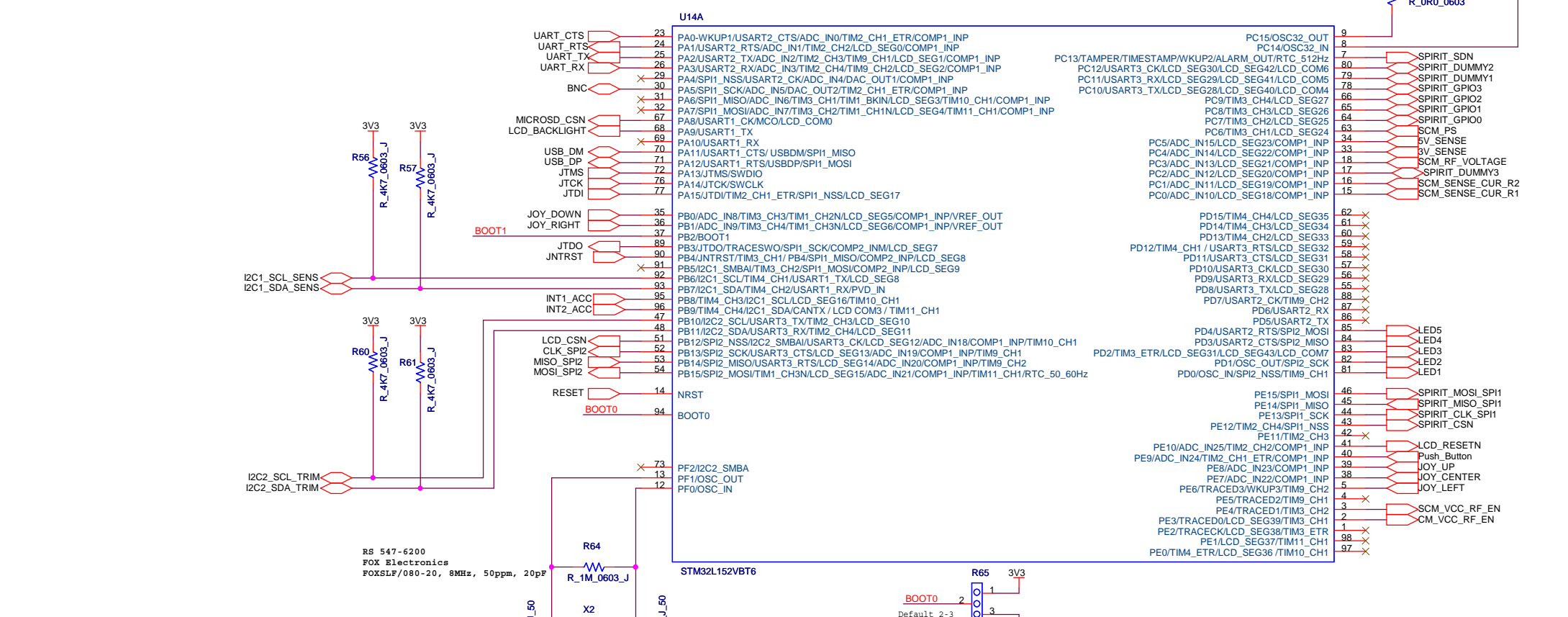
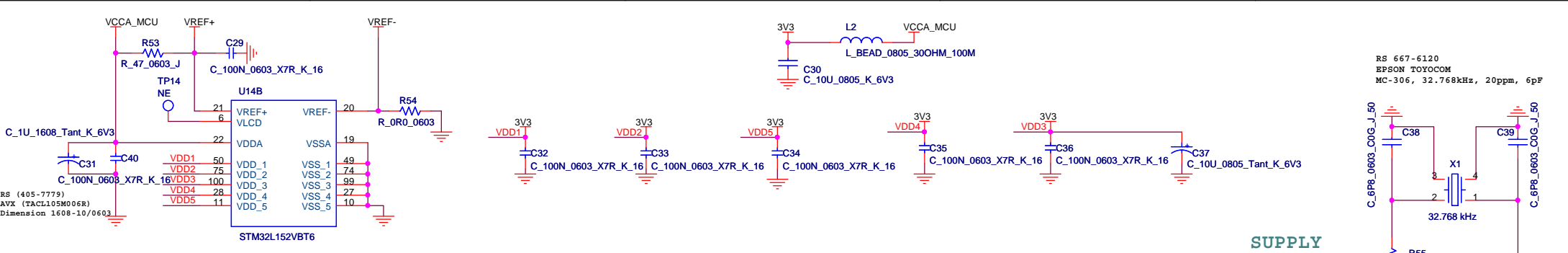
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Title		
LEDS		
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A	<Doc>	<RevCode>
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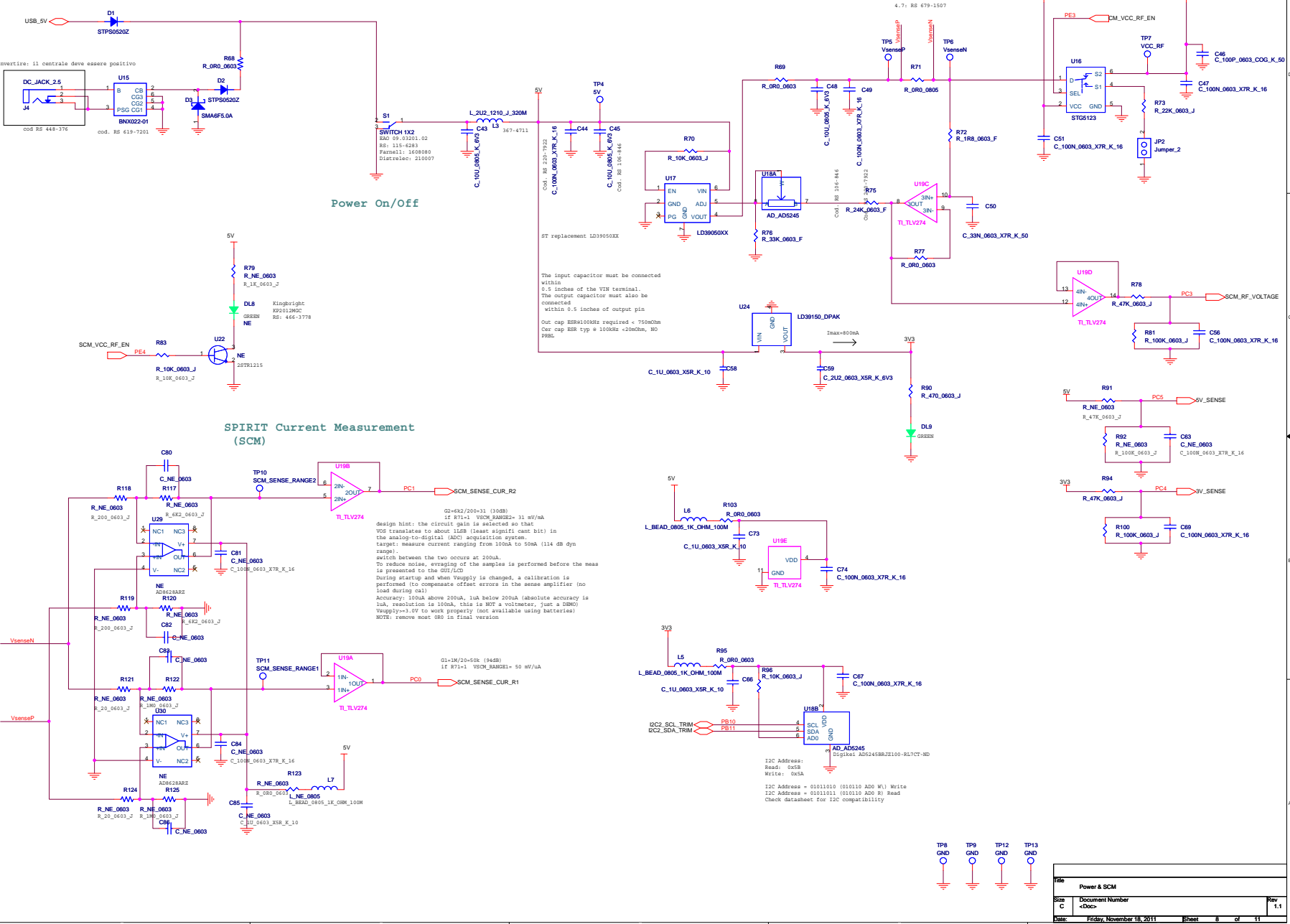
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1.8V - 3.6V Power Management with 110dB current range measurement

TP4=4.7 02m
 TP5=100m
 TP6=100m
 TP7=100m
 TP8=100m
 TP9=100m
 TP10=100m
 TP11=100m
 TP12=100m
 TP13=100m



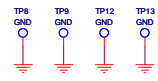
Power On/Off

SPIRIT Current Measurement (SCM)

The input capacitor must be connected within 0.5 inches of the VIN terminal. The output capacitor must also be connected within 0.5 inches of output pin.

design hint: the circuit gain is selected so that VOS translates to about 1LSB (least signif cant bit) in the analog-to-digital (ADC) acquisition system. target: measure current ranging from 100nA to 100mA (114 dB dyn range). Accuracy: 100nA above 200nA, 1uA below 200nA (absolute accuracy is 1uA, resolution is 100nA, this is NOT a voltmeter; just a DMM) Vavgply>>3.0V to work properly (not available using batteries) NOTE: remove most 000 in final version

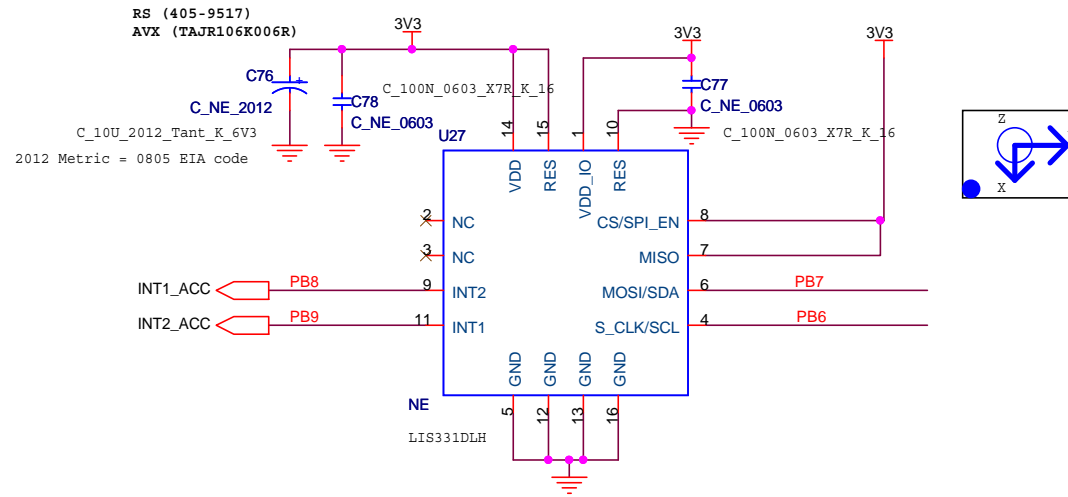
I2C Address: Digital AD5245(8B)2100-0L7CT-ND
 Read: 0x38
 Write: 0x3A
 I2C Address = 0101010 (010110 ADD W) Write
 I2C Address = 0101011 (010110 ADD R) Read
 Check datasheet for I2C compatibility



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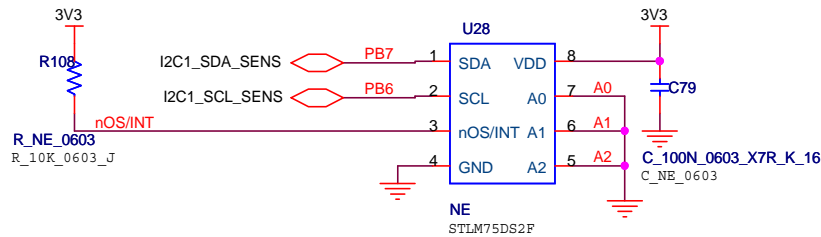
Tantalum AVX ESR max at 100 kHz = 6 Ohm
 Ceramic Cap 0805 10uF 6V3 ESR typ at 100 kHz=0.1 Ohm!!!

Accelerometer LIS331DLH



The Slave Address (SAD) associated to the LIS331DLH is 001100xb. SDO/SA0 pad can be used to modify less significant bit of the device address. If SA0 pad is connected to voltage supply, LSB is '1' (address 0011001b) else if SA0 pad is connected to ground, LSB value is '0' (address 0011000b). This solution permits to connect and address two different accelerometers to the same I2C lines.

Temperature Sensor

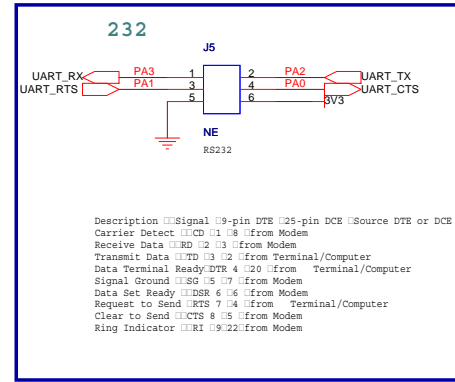
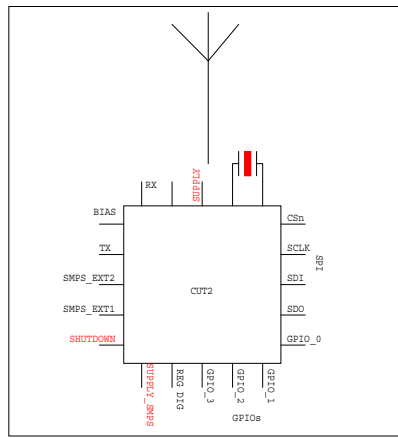


I2C Address:
 Read: 0x91
 Write: 0x90

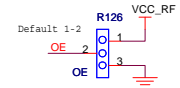
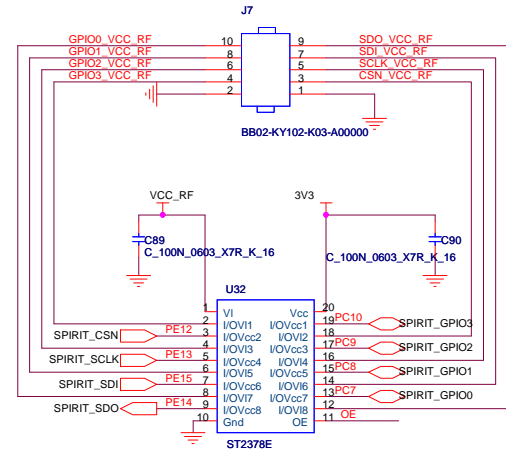
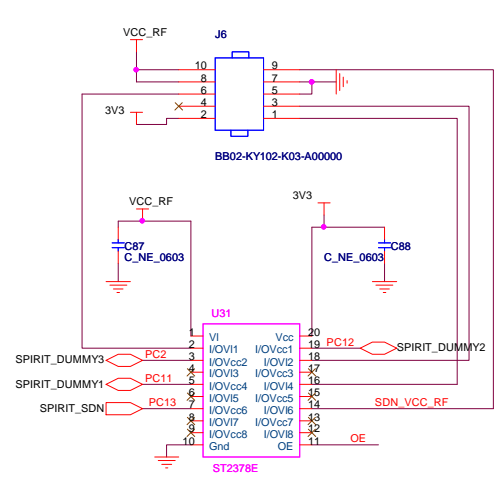
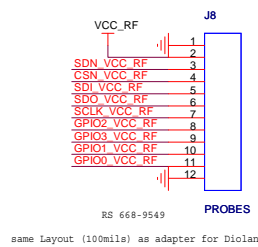
I2C Address = 10010000 (1001A2A1A0W) Write
 I2C Address = 10010001 (1001A2A1A0R) Read

Title		Sensing	
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SPiRiT AND EXTENSION CONNECTORS



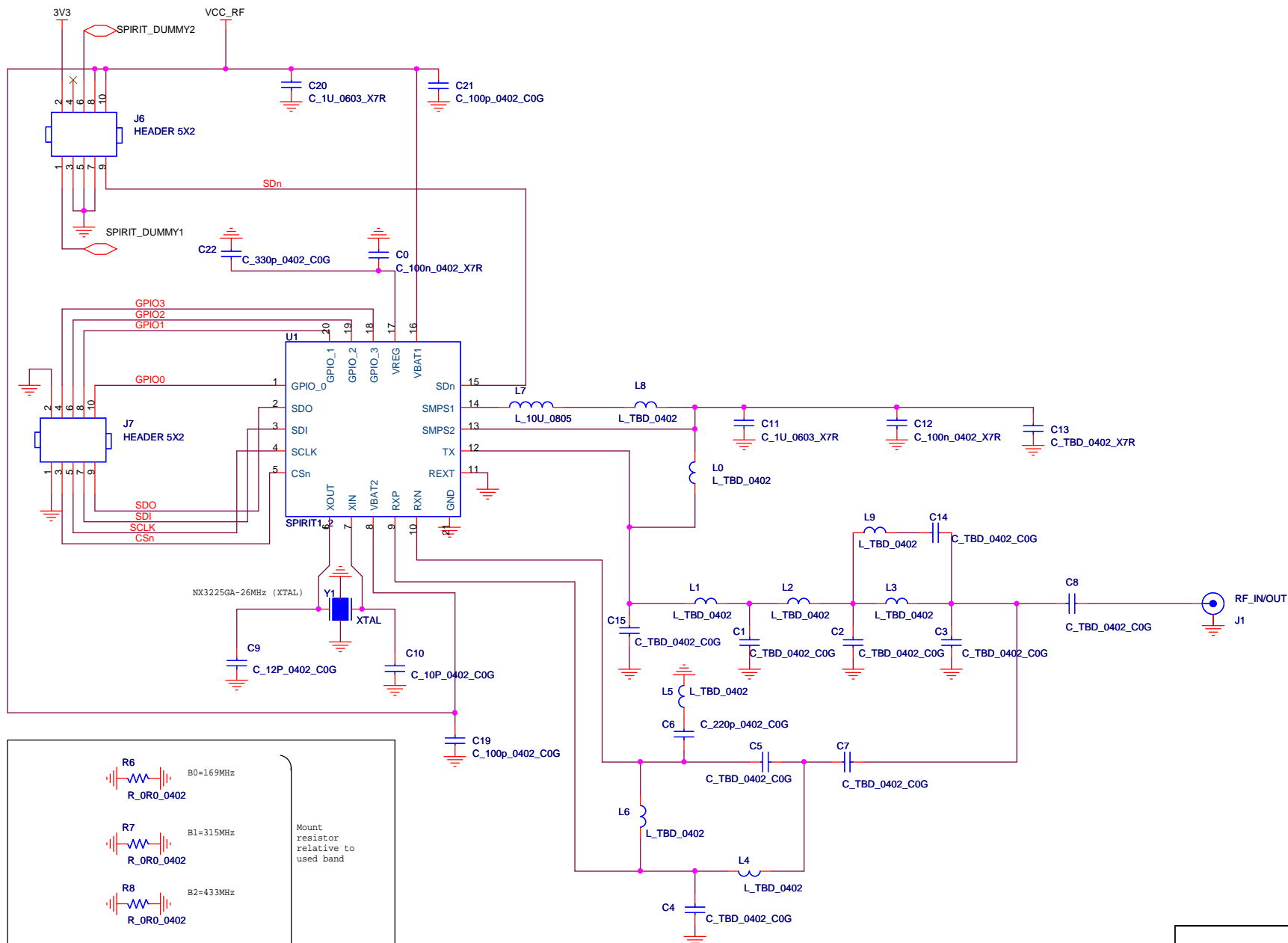
Gradconn BB02-KY102-K03-A00000



LEVEL TRASLATOR

Title		
SPiRiT AND EXTENSION CONNECTORS		
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R6	B0=169MHz	Mount resistor relative to used band
R7	B1=315MHz	
R8	B2=433MHz	
R9	B3=868/915MHz	

Title		
SPIRIT1 CUT 2.0 RF PCB V3 - GENERIC		
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